

Abstract

Safety systems for power equipment are disclosed. The safety systems include a detection system adapted to detect contact between a person and a working portion of a machine, where the detection system is adapted to capacitively impart an electric charge on the working portion and to detect when that charge drops; and a reaction system associated with the detection system to cause a predetermined action to take place relative to the working portion upon detection of contact between the person and the working portion by the detection system. Machines equipped with safety systems are also disclosed, such as saws, jointers, etc. The machines include a working portion, such as a cutter or blade, a detection system adapted to detect a dangerous condition between a person and the working portion, and a reaction system associated with the detection system to cause a predetermined action to take place upon detection of the dangerous condition, such as a brake system to stop the working portion, a retraction system to retract the working portion, or a system to cover the working portion. The machines may include a control system adapted to control the operability of one or more of the working portion, the detection system and the reaction system.